WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

1. In a system wherein a digital signature is attached to an electronic document and can be isolated from the electronic document such that the electronic document is no longer digitally signed, a method for digitally signing the electronic document such that the digital signature is embedded in the electronic document, the method comprising acts of:

creating an electronic document by providing content for the electronic document;

inserting a signature block for each signer that will digitally sign the document, wherein each signature block is embedded in the electronic document and each signature block has a one or more attributes, the one or more attributes including a signature attribute;

when a signer digitally signs the electronic document, filling some of the one or more attributes before generating the digital signature for the electronic document;

generating the digital signature such that the digital signature includes the filled one or more attributes; and

placing the digital signature in the signature attribute of the signature block of the signer.

2. A method as defined in claim1, wherein the act of inserting a signature block for each person, further comprises:

an act of inserting a notary signature block after the electronic document is signed by a primary signer; and

an act of inserting a recorder signature block after the electronic document is digitally signed by the notary.

3. A method as defined in claim 1, wherein the act of creating an electronic document further comprises an act of inserting information about each person that will sign the document, wherein the information does not include a signature block.

4. A method as defined in claim 1, wherein the act of filling some of the one or more attributes further comprises acts of:

filling a timestamp attribute with a time and a date; and

filling a signername attribute with a name of the signer.

5. A method as defined in claim 1, wherein the act of filling some of the one or more attributes further comprises an act of filling a certificate attribute of the signature block.

6. A method as defined in claim 1, wherein the act of generating the digital signature further comprises acts of:

generating a hash of the electronic document including the filled one or more attributes; and

encrypting the hash with a private key of the signer to produce the digital signature.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

7. A method as defined in claim 6, wherein the act of placing the digital signature in the signature attribute further comprises an act of placing the encrypted hash in the signature attribute.

8. A method as defined in claim 1, wherein the signature block comprises a signature element, wherein the signature element comprises a hashalgorithm attribute; a datetime attribute, a signername attribute, a signertitle attribute, text, a signature attribute, and a certificate attribute, wherein the certificate attribute includes a digital signature of a certificate authority and wherein the text is displayed after the electronic document is digitally signed.

9. A method as defined in claim 1, wherein each signature block includes a reconstruct attribute, wherein the reconstruct attribute is used to reconstruct the electronic document and verify the digital signature in the signature block.

10. A method as defined in claim 1, further comprising an act of displaying a name of the signer.

11. A computer program product having computer executable instructions for performing the acts recited in claim 1.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

12. In a system requiring digital signatures for electronic documents, wherein the digital signatures are attached to the electronic documents and can become separated from the electronic document, an electronic document having an embedded digital signature, the electronic document comprising:

a content portion; and

a signature block for each signer that will digitally sign the electronic document, wherein the signature block is embedded in the electronic document before the electronic document is digitally signed, wherein the signature block comprises:

a signature element, the signature element comprising:

a signature attribute that stores the digital signature of the signer, wherein the digital signature of the signer is placed in the signature attribute when the signer digitally signs the document, wherein the digital signature is an encrypted hash of the electronic document; and

a certificate attribute that stores a digital signature of a certificate authority.

13. An electronic document as defined in claim 12, wherein the signature block is a notary signature block used for a digital signature of a notary public.

14. An electronic document as defined in claim 12, wherein the signature block is a recorder signature block used for a digital signature of a recorder.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

15. An electronic document as defined in claim 12, wherein the signature element further comprises:

a hashalgorithm attribute that identifies a hash that was used to hash the electronic document;

a datetime attribute that serves to timestamp the digital signature of the signer;

text that represents a name of the signer such that the name of the signer is displayed after the electronic document is digitally signed;

a signername attribute that identifies the name of the signer; and

a signertitle attribute that identifies a title of the signer.

16. An electronic document as defined in claim 12, the electronic document further comprising:

a routing portion that is used to electronically route the electronic document, wherein the routing portion identifies an origination server and a destination server; and

an endorsement portion, wherein the endorsement portion is filled by a recorder with endorsement data required for recordation of the electronic document.

17. An electronic document as defined in claim 12, wherein the signature block further comprises a reconstruct attribute used to reconstruct the electronic document to a previous state and wherein the electronic document further comprising a

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

signature display element, wherein a name of the signer is displayed on the electronic document after the electronic document is digitally signed by the signer.

18. An electronic document as defined in claim 17, wherein the name of the signer is displayed in color.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

19. In a system that includes electronic documents that are digitally signed, a method for validating an electronic document that is digitally signed with an embedded digital signature, the method comprising acts of:

generating an electronic document, wherein the generated electronic document has content;

embedding one or more digital signatures in corresponding signature blocks of the electronic document, wherein one of the corresponding signature blocks is added to the electronic document when one of the one or more digital signatures is generated;

reconstructing the electronic document to a previous state using the corresponding signature blocks to identify data to remove from the electronic document, wherein the removed data corresponds to information added to the electronic document after the previous state, wherein removed data includes a digital signature;

hashing the reconstructed electronic document to produce a hash result; and

decrypting the removed digital signature to produce a signature result, wherein the electronic document is validated if the signature result matches the hash result.

20. A method as described in claim 19, wherein the act of embedding one or more digital signatures further comprises acts of:

filling one or more attributes of a particular signature block before generating a particular digital signature; and

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

generating the particular digital signature such that the filled one or more attributes are related to the particular digital signature.

21. A method as defined in claim 20, wherein the filled one or more attributes comprise:

a datetime attribute of the particular signature block; and

a certificate element for the particular signature block.

22. A method as defined in claim 19, wherein a hash for the act of hashing the reconstructed document is identified in the signature block.

23. A method as defined in claim 19, wherein the removed data further comprises at least one signature block that was added after the signature block of the digital signature being verified.

24. A computer program product having computer executable instructions for performing the acts recited in claim 19.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

25. A method for embedding a digital signature in an electronic document such that the digital signature cannot be separated from the electronic document, the method comprising acts of:

generating content for the electronic content;

for each signer that will digitally sign the electronic document, embedding a signature block in the electronic document, wherein each signature block comprises:

a signature element, the signature element comprising:

a hashalgorithm attribute that identifies a hash for hashing the electronic document;

a datetime attribute for time stamping the electronic document;

a signature attribute for storing the digital signature of the signer; and

a certificate attribute for storing a digital certificate of a certificate authority;

generating a digital signature by a signer, wherein a portion of the signature block is filled before the digital signature is generated such that a hash of the electronic document includes the portion of the signature block; and

storing the generated digital signature in the signature attribute of the signature block.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

26. A method as defined in claim 25, wherein successive digital signatures have an option of including previous digital signatures.

27. A method as defined in claim 25, wherein the signature block further comprises:

an optional reconstruct attribute for use in reconstructing the electronic document;

a signername attribute identifying a name of the signer; and

a signertitle attribute identifying a title of the signer.

28. A method as defined in claim 25, wherein the act of generating a digital signature of a signer further comprises an act of hashing the electronic document, wherein a first portion of the signature block is filled when the electronic document is generated and wherein a second portion of the signature block is filled just before the digital signature is generated such that act of hashing the electronic document includes both the first portion and second portion of the signature block, wherein the generated digital signature is stored in the signature attribute of the signature block.

29. A method as defined in claim 25, wherein the act of embedding a signature block occurs when the signer digitally signs the electronic document.

30. A computer program product having computer executable instructions for performing the acts recited in claim 25.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

31. A method for using an electronic document in a transaction, the method comprising steps for:

preparing an electronic document, the step for preparing an electronic document comprising acts of:

entering content in the electronic document;

embedding one or more digital signatures in the electronic document in corresponding signature blocks, wherein each corresponding signature blocks are added when a corresponding signer digitally signs the electronic document and wherein successive signature blocks are removed from the electronic document when reconstructing the electronic document to a previous state;

performing a preliminary verification on the electronic document to ensure that the document will be recorded, wherein the preliminary verification ensures that the electronic document complies with particular validation rules;

transmitting the electronic document from an origination server to a destination server, wherein the origination server and the destination server are identified in routing data included in the electronic document;

processing the electronic document, the step for processing the electronic document comprising acts of:

validating the electronic document;

endorsing the electronic document by a recorder;

digitally signing the electronic document by the recorder; and

generating a receipt for the electronic document; and

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

returning the recorded electronic document and the receipt to the origination server.

32. A method as defined in claim 31, wherein the act of embedding one or more digital signatures in the electronic document further comprises acts of:

filling one or more attributes of a particular signature block before generating a particular digital signature; and

generating the particular digital signature such that the one or more attributes are related to the particular digital signature.

33. A method as defined in claim 31, wherein the act of validating the electronic document further comprises an act of reconstructing the electronic document to a previous state by stripping data from the electronic document that is not included in the digital signature.

34. A method as defined in claim 31, wherein the act of performing a preliminary verification further comprises acts of:

performing a schema check on the electronic document;

performing a profile check on the electronic document; and

selecting the particular validation rules for the electronic document, wherein the particular validation rules are specific to a jurisdiction.

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111